PRINCE EDWARD ISLAND

ENERGY CORPORATION

ANNUAL REPORT

1981-1982

BOARD OF DIRECTORS

Hon. Barry Clark, Chairman,
Mr. John H. Reynolds, Vice Chairman
Mr. G. Douglas Dennis, Secretary-Treasurer
Dr. C. Kirk Brown
Mr. Bruce McCallum
Mr. Don Gillis
Mr. Norman F. Stewart

The Honourable Barry Clark
Minister
Department of Tourism, Industry & Energy
P.O. Box 2000
Charlottetown, P.E.I.

Dear Mr. Minister:

I have the honour to present to you the attached annual report of the Prince Edward Island Energy Corporation for the year ending March 31, 1982. This report has been prepared and is submitted in accordance with the Energy Corporation Act, Section 10(1).

Respectfully submitted,

A. J. Hiscock
General Manager

1. INTRODUCTION

This is the third annual report of the P.E.I. Energy Corporation. The Energy Corporation was established by the Energy Corporation Act which was proclaimed on December 9, 1978.

The objects of the Energy Corporation are to develop and promote energy systems on an economic and efficient basis, and to coordinate all government programs in the establishment and application of energy systems in the province.

The Corporation operates within the general framework of provincial energy policy which is the responsibility of the Minister of Tourism, Industry & Energy.

2. BOARD OF DIRECTORS

The members of the Board of Directors and their term of office are as follows:

Hon. Barry Clark, Chairman — 1 April 1980 —
John H. Reynolds, Vice Chairman — 5 October 1980 — 5 October 1983
G. Douglas Dennis, Secretary-Treasurer — 9 November 1981 — 9 November 1984
C. Kirk Brown — 5 October 1980 — 5 October 1983
Bruce McCallum — 18 September 1980 — 18 September 1983
Donald Gillis — 26 March 1981 — 26 March 1984
Norman F. Stewart — 26 March 1981 — 26 March 1984
Hon. Horace Carver (resigned) — 9 August 1979 — 5 October 1981

3. STAFF

Staff of the Energy Corporation consists of three full time positions, unchanged from last year. Arthur J. Hiscock, formerly Operations Manager, was named General Manager, combining the roles of Operations Manager and Executive Director.

4. ACTIVITIES

The principal projects have been the Charlottetown Area Garbage Incinerator and the Kings County Memorial Hospital wood fueled heating system. In addition, the Corporation has been involved with other government departments and agencies in developing proposals or conducting studies to determine economic ways of reducing the province's dependence on oil, through a cost effective mix of alternative energy supply and conservation. Additional details on some of these activities and projects follow.

4.1 Charlottetown Area Garbage Incinerator

Working with Tricil Limited, the Corporation completed a feasibility study and proposal for an energy from waste plant in Parkdale. Tricil Limited and the Corporation entered into a five year, full service contract in May 1981 under which Tricil is responsible for the design, construction and operation of the plant. The facility will use municipal solid waste to produce steam.

Financing for the $9 million project will consist of a $4 million grant from Energy, Mines and Resources Canada and loans guaranteed by the government of Prince Edward Island. The loans will be repayed from revenues from the sale of steam to the Queen Elizabeth and Riverside Hospitals, at prices reflecting savings on fuel oil, and from a "tipping" fee from the Prince Edward Island Department of Community Affairs based on savings in landfill disposal costs.

Construction work began in September 1981. The major contracts awarded were as follows:

Site preparation — Island Coastal Services
Foundations — Schurman Construction Ltd.
Structural steel — Prebilt Structures, Sherwood
Incinerators — Georgetown Shipyard

Other contracts will be called in phases. The scheduled completion date is December 1982.

4.2 Kings County Memorial Hospital Wood Fueled Heating System

An agreement with the Kings County Memorial Hospital was approved in June of 1981 for the construction of a wood chip burning unit to provide all the hospital's heating needs. The estimated capital cost of the project was $325,000, to be cost shared on an 80/20 basis under the Comprehensive Development Plan. Completion had been scheduled for December 1981 but was delayed by mechanical installation problems. Start-up is now expected in April. Some increase in cost may occur. The Corporation is to own and operate the facility for two years, after which it will be turned over to the hospital.

One of the principal aims of the project is to demonstrate the technical and economic effectiveness of wood chip fuel in Prince Edward Island. Accordingly, agreement was reached with Energy, Mines and Resources Canada to cost share an evaluation and technology transfer project. The work will be done under contract by the Institute of Man & Resources and IEA Consulting Group Limited. Wood chips will be supplied by J.O. Hornby Limited for the two year period of the demonstration.

4.3 Ethanol from Cull Potatoes

In the fall of 1980 the Duffy Company was selected from three applicants for a joint venture with the Energy Corporation to build and operate an ethanol from cull potato plant in Kinkora. Funding of the project was cost shared on a 50-50 basis with Environment Canada under the Development and Demonstration of Resource and Energy Conservation (DRECT) program. Stanfer Manufacturing Limited of Montreal was awarded a contract to supply the equipment and it was anticipated that the facility would startup in the fall of 1981. Major losses by Stanfer in contracts in the United States culminated in November, 1981 with bankruptcy.

A second Canadian equipment supplier, Gasohol Inc., was contracted to evaluate the existing building facilities and prepare a proposal to supply

equipment. The new price proposal was so high that the project was no longer financially feasible. Accordingly, the Corporation recommended to Executive Council that the project be cancelled. Executive Council agreed and Duffy Company was advised.

Duffy Company is currently investigating other sources of funding.

4.4 Electricity Supply and Demand Study

Slater Energy Consultants Inc. were retained in May of 1981 to examine electrical supply and demand alternatives for Prince Edward Island to 1995.

The project was funded under the Comprehensive Development Plan and a Steering Committee consisting of Federal, Provincial and Utility representatives was formed to oversee the consultant's activities.

The study examined the future demand for electricity and the resources potentially available to meet the demand. Several alternative supply plans were developed using the most promising of the available resources.

The final draft of the report was received in February, 1982, and was forwarded to the Corporation by the Steering Committee. A meeting between the Corporation and the Consultant is scheduled for April to review the report in detail.

4.5 Wood Blocking and Splitting Program

The forgivable grant program, which provides 50% of the cost of wood blocking and splitting equipment up to $1,250, has proven very popular and has helped to meet the needs of Islanders for such equipment, on a rental basis, throughout the province.

Thirty-two contracts have been signed and a number of applications are pending. It is proposed to extend the program to fiscal 1982-83.

5. PROJECTS UNDER DEVELOPMENT

5.1 District Heating Study Proposal

A district heating study proposal was developed by the Corporation and submitted to Energy, Mines & Resources Canada in June of 1981. An earlier federal study had identified Charlottetown as the most promising location in Atlantic Canada for district heating. Funding for the project would come from a program outlined in the National Energy Program of October 1980.

No formal reply has been received from Energy, Mines & Resources. There is a concern that Energy, Mines & Resources Canada may delete the district heating program from the National Energy Program.

5.2 Mt. Pleasant Wind Farm

A project to build and demonstrate a six machine, 1.8 megawatt wind farm in Prince Edward Island has been under development for some time. Such a facility would produce 2.4 million kWh annually at the Mt. Pleasant Airport, the most attractive on-Island site. The Corporation is negotiating with the

Ministry of Transport in Moncton to determine if the wind farm and the recently paved runwav at Mt. Pleasant would be compatible simultaneous uses for the airport.

5.3 Power Gasifier Project

The Energy Corporation has been investigating the possibility of constructing a wood gasifier/engine/generating plant on the Island which would demonstrate production of electricity from wood. Discussions with the Town of Summerside confirmed the Town's interest in such a unit.

The Federal Republic of Germany (FRG) had expressed a willingness to participate financially in the program as the equipment would have been supplied by a German firm. The National Research Council had been designated as the official contact with the FRG for the project. Delays in completing financial arrangements led the Corporation to cease project development.

The Chairman of the Board met with officials of the Town of Summerside in October 1981 to discuss electrical power supply and to inform them of the difficulties which led to the Corporation's decision.

5.4 Renewable Energy Initiatives Program

Included in the 1982-83 budget for the Energy Corporation is funding for a Renewable Energy Initiatives Program. This program is being developed by the province to replace the conservation and renewable energy development programs which were jointly funded by Canada and Prince Edward Island and which were terminated in March of 1980.

The prime objectives are to demostrate promising renewable energy technologies; to develop public awareness and understanding of these technologies; and to create employment in new or existing industries. Guidelines for project proposals are being prepared by a selection committee appointed by the Board of Directors and project proposals will be received during fiscal 1982-83.

5.5 Demonstration of Intermediate Size Wood Chip Burning Units

In reviewing energy audits conducted by Enersave, it was noted that there are some 300 commercial and institutional facilities in the range of 20-30 boiler H.P. To demonstrate the benefits of wood burning on this scale, funding was obtained from the Comprehensive Development Plan for the installation of an intermediate size unit. A number of sites in Kings County are being examined and it is anticipated that construction on a project will begin in fiscal 1982-83.

6. STUDIES IN PROGRESS

6.1 Charlotte and Huntingdon Court Conversion to Wood Fuel

In August of 1981, the Corporation supported a request from the Housing Corporation to fund a feasibility study to convert the oil fired heating systems at the Charlotte and Huntingdon Court Senior Citizens residences

to wood fuel using one central heating plant. Crowfield Associates were selected by a steering committee in February of 1982 to conduct the study scheduled for completion in October.

6.2 Energy Options for Prince Edward Island

During the fall of 1981 discussions on extending a natural gas pipeline to Prince Edward Island took place between Energy, Mines and Resources Canada and the province. During the discussions it became evident that a study of all the energy alternatives (electricity, oil, coal, natural gas, propane, wood, renewables and conservation) was needed to indicate the most effective way to meet the long term needs of the province. In March of 1982 the Federal and Provincial Energy Ministers agreed to a study. Most of the work is to be done in-house under a federal/provincial steering committee. Where information gaps are found, outside consultants will be contracted to prepare reports. December, 1982, has been set as the target date for completion.

6.3 P.E.I. Hospital Conversion to Wood Fuel

Wood Energy Systems of Charlottetown submitted a proposal to the Policy & Priorities Board to convert the P.E.I. Hospital's heating system to wood fuel and to provide heat to the Provincial Administration Building from the same facility. Policy & Priorities Board asked the Energy Corporation to evaluate the proposal independently. CBCL Limited, Charlottetown, was selected to study the technical and economic feasibility of the proposed system and to identify other related options. A final report is expected in June, 1982.

6.4 Pelletized Wood Fuel Production

In November of 1981, the Province's Wood Energy Committee submitted a strategy paper on pelletized wood fuel production to the Corporation. The objective of this document was to propose a strategy that would result in a pelletized wood fuel industry in Prince Edward Island. The strategy paper identified questions of technology and markets that would have to be addressed before a financial proposal could be made to funding agencies.

After reviewing the paper, the Board of Directors suggested that a public meeting be held to determine the interests of the private sector in pelletized wood fuel. The meeting was attended by some 40 persons representing the interests of harvesters, truckers and processors. At the public meeting it was generally agreed that the following background studies were required:

(a) Use of straw as a fuel source

(b) Inventory of sawmill residues on P.E.I. and the projected annual volume

(c) Review of existing pelletizing technologies

(d) Identification of possible government financing

The strategy paper on pelletized wood fuel production was discussed with Comprehensive Development Plan managers who agreed to fund the background studies.

Terms of reference for the studies are being prepared by a Federal/Provincial steering committee and contracts will be awarded by June of 1982.

7. FINANCIAL STATEMENT

The financial statement prepared by our duly appointed auditors follows.

AUDITORS' REPORT TO THE DIRECTORS

We have examined the balance sheet of Prince Edward Island Energy Corporation as at March 31, 1982 and the statements of revenues and expenditures — operating and capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at March 31, 1982 and the results of its operations for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

COOPERS & LYBRAND
CHARTERED ACCOUNTANTS

PRINCE EDWARD ISLAND ENERGY CORPORATION
BALANCE SHEET AS AT MARCH 31, 1982
ASSETS

	1982 $	1981 $
CURRENT ASSETS		
Cash	90,812	11,922
Term deposits	—	418,940
Accounts receivable	560,681	52,867
Accrued interest receivable	—	3,707
Projects under development (note 2)	2,454,518	144,818
	3,106,011	632,254
FIXED ASSETS — at cost (note 1)		
Furniture and fixtures	192	—
Less Retirements out of grants	192	—
	—	—
	3,106,011	632,254

LIABILITIES

CURRENT LIABILITIES		
Accounts payable and accrued liabilities	38,351	44,815
Bank loan (note 4)	1,520,000	—
	1,558,351	44,815

SURPLUS

OPERATING	205,272	231,452
CAPITAL (note 5)	1,342,388	355,987
	1,547,660	587,439
	3,106,011	632,254

SIGNED ON BEHALF OF THE BOARD

Barry Clark, Chairman

Director

G. Douglas Dennis, Secretary-Treasurer

Director

PRINCE EDWARD ISLAND ENERGY CORPORATION
STATEMENT OF REVENUES AND EXPENDITURES
— OPERATING AND SURPLUS
FOR THE YEAR ENDED MARCH 31, 1982

	1982 $	1981 $
REVENUES		
Grants		
Province of Prince Edward Island	679,706	320,143
Fisheries and Environment Canada	100,000	—
Federal — Provincial agreement	—	25,000
Tender deposits	200	—
	779,906	345,143
EXPENDITURES		
Projects		
Hospital Wood Chip Burning Unit	327,369	
Hospital Wood Chip Burning Unit - operations	35,623	
Ethanol Plant	183,681	
Electrical Supply demand study	50,060	
Wood Blocking and Splitting Program	21,292	10,137
Auto Fuel Test Program		8,672
	618,025	18,809
Administration		
Consulting	51,895	41,791
Office furniture	192	
Directors honorarium	8,542	1,881
Travel	16,162	10,710
Office supplies	457	2,114
Miscellaneous	1,823	1,425
Telephone	4,331	3,147
Wages and wage levies	96,646	107,975
Audit	4,100	1,200
Materials and supplies	3,913	2,505
	188,061	172,748
TOTAL EXPENDITURES	806,086	191,557
EXCESS REVENUES (EXPENDITURES) FOR THE YEAR	(26,180)	153,586
SURPLUS — BEGINING OF YEAR	231,452	77,866
SURPLUS — END OF YEAR	205,272	231,452

PRINCE EDWARD ISLAND ENERGY CORPORATION
STATEMENT OF REVENUES AND EXPENDITURES
— CAPITAL AND SURPLUS
FOR THE YEAR ENDED MARCH 31, 1982

	1982 $	1981 $
REVENUES		
— Province of Prince Edward Island	500,000	—
— Federal Department of Energy, Mines & Resources	474,489	—
— Fisheries and Environment Canada	—	250,000
— Interest	11,912	50,944
	986,401	300,944
EXPENDITURES		
Site preparation	—	40,623
NET REVENUES FOR THE YEAR	986,401	260,321
SURPLUS — BEGINNING OF YEAR	355,987	95,666
SURPLUS — END OF YEAR	1,342,388	355,987

PRINCE EDWARD ISLAND ENERGY CORPORATION
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 1982

1. ACCOUNTING POLICY

Fixed assets —

The fixed assets are recorded as a cumulative figure which is retired out of grants and revenues and expensed in the statement of revenues and expenditures during the period in which the transaction occurs.

2. PROJECTS UNDER DEVELOPMENT

The company follows the policy of capitalizing those projects which are incomplete at year end. When such projects are completed and all funds have been received, they will be removed from the balance sheet.

	1982	1981
	$	$
Wood Chip Burning Unit	—	5,702
Energy from waste	2,454,518	20,656
Ethanol Plant	—	118,460
	2,454,518	144,818

3. COMMITMENTS

On the 29th of May 1981, the corporation entered into an agreement with Tricil Limited to design, construct and operate a waste burning plant. The contract price stated in the agreement was $8,161,000 with a projected completion date of July 1983.

4. SECURITY FOR BANK LOAN

The bank loan is secured by a letter of guarantee from the Province of Prince Edward Island.

5. CAPITAL SURPLUS

The corporation has adopted the policy of capitalizing those funds received in financial support of the Waste Burning Plant. Once the plant is operational, the surplus will be amortized to income over the useful life of the plant.

8. ACKNOWLEDGEMENTS

The Corporation acknowledges with thanks the contributions made by a number of individuals and organizations within the federal and provincial governments and the private sector which have contributed substantially to activities of the Corporation. Without these donated contributions of expertise, criticism and advice the Corporation's activities would be seriously impaired.